

No.

200500096



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*Advanta Seeds R. H.*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMERICAL GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, HARD

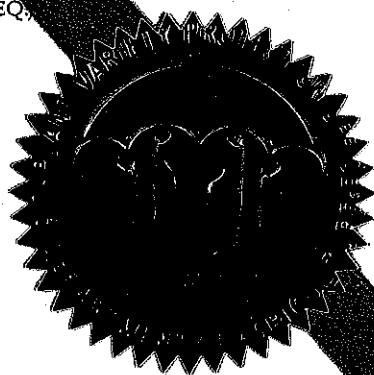
'AHF116'

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this sixth day of February, in the year two thousand and seven.*

Attest:

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER <b>Advanta Seeds B.V.</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME <b>AHF116</b>		3. VARIETY NAME <b>AHF116 (PT: 10/6/2006)</b>	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <b>Dijkwelsestraat 70 NL - 4421 AJ Kapelle The Netherlands</b>		5. TELEPHONE (include area code) <b>+31 113 347 900</b>		FOR OFFICIAL USE ONLY PVPO NUMBER <b>200500096</b> FILING DATE <b>1/18/2005</b>	
		6. FAX (include area code) <b>+31 113 338 116 (PT: 9/18/2006)</b>			
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) <b>Incorporated</b>		8. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>The Netherlands</b>		9. DATE OF INCORPORATION <b>12-3-1986</b>	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) <b>Kenneth Hignight C/O Advanta Pacific, LLC 33725 Columbus St SE Albany, OR 97322 USA</b>				FILING AND EXAMINATION FEES: \$ <b>3652.00</b> DATE <b>1/18/2005</b> CERTIFICATION FEE: \$ <b>768.00</b> DATE <b>1/8/2007</b>	
11. TELEPHONE (include area code) <b>(541) 967-8923</b>		12. FAX (include area code) <b>(541) 967-8223</b>		13. E-MAIL	
14. CROP KIND (Common Name) <b>Hard Fescue</b>		16. FAMILY NAME (Botanical) <b>Poaceae</b>		18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP <b>Festuca brevipila</b>		17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)				20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input checked="" type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input type="checkbox"/> NO (If "no", go to item 23) 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED 22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)				24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF OWNER <b>Kenneth Hignight</b>		SIGNATURE OF OWNER			
NAME (Please print or type) <b>Kenneth Hignight</b>		NAME (Please print or type)			
CAPACITY OR TITLE <b>Director of Research</b>		DATE <b>1-15-05 (PT: 1/16/06)</b>		CAPACITY OR TITLE <b>Director of Research</b>	
				DATE	

(See reverse for instructions and information collection burden statement)

**Exhibit A:****Origin and Breeding History**

**'AHF116' Hard Fescue**  
(BT:10/6/2006)

(BT:10/6/2006) 1.

'AHF116' originates from two crossing cycles and two cycles of phenotypic recurrent selection. The initial crossing population consisted of the following cultivars; Frontier, Waldina, Brigade, Reliant, Warwick, and SR 3000.

A single spaced plant nursery was established in the fall of 1993 containing the six parents. In the spring of 1994 selections were made based on general impression, uniformity, genetic color, number of inflorescence, crown density, and freedom from disease. Fifteen clones were moved together in the fall of 1994 and designated AHF027. The 15 clones were harvested in bulk (1995) and AHF027 was planted in a turf trial near Salem, New Jersey.

Survivors from the 1995 turf trial were removed in August, 1998. The plants were returned to Albany, Oregon for multiplication. Two of the experimental lines returned were; 1) AHF066 - selection from AHF027 and 2) AHF070 - selection from Frontier. The lines were harvested independently in 1999 and then planted in a single spaced plant nursery in the fall.

The single spaced plant nursery was planted in a block design, 100 plants per block, and replicated three times. In the spring of 2000 selections were made based on general impression, uniformity, genetic color, number of inflorescence, crown density, and freedom from disease. Seven clones from AH066 and five clones from AHF070 were selected and designated AHF116. The 12 clones were harvested in bulk (2001) and AHF116 was planted in an increase block.

In the fall of 2001 an increase block of AHF116 was established. In 2002 negative mass selection was used and .07% of the plants were rogued from the population. The remaining plants were harvested in bulk and designated breeder seed. Breeder seed was used to establish a morphological nursery for Plant Variety Protection (PVP) measurements.

2. Breeder Seed Maintenance:

A breeder seed multiplication was planted in isolation in 2001 in Albany, Oregon. Seed was harvested in bulk in 2002 and is maintained in cold storage. Seed propagation is limited to three generations, one each of foundation, registered, and certified.

3. Stability and Uniformity:

AHF116 has been a stable uniform cultivar over 2 generations. No off-type or variant plants have been observed during the multiplication or reproduction. During the breeder seed multiplication 0.2 % of the plants were removed. These types were not observed during the subsequent generations. Turf plots of AHF116 have been uniform.

**Exhibit A (addendum): Statement of Stability and Uniformity for AHF116 Hard Fescue**

AHF116 has been a stable uniform cultivar over two generations. No off-type or variant plants have been observed during the multiplication or reproduction. During the breeder seed multiplication 0.2% of the plants were removed to improve the uniformity of the population. The plants that were removed showed less vigor and had poor plant health. It is not known if the lack of vigor was due to environmental factors, genetic factors, or an environment by genetic interaction. These types were not observed during the subsequent generations. Turf plots of AHF116 have been uniform and stable.

**Exhibit B:****Novelty Statement of AHF116 Hard Fescue**

The following summary outlines the distinctive characteristics of AHF116. The novelty of AHF116 is based on the unique combination of these characteristics. AHF116 is most similar to Scaldis, but may be differentiated by using the following criteria:

- 1) AHF116 has a mature plant height at least 47 mm shorter than Scaldis (tables 1A, 1B).
- 2) The panicle length of AHF116 is at least 50 mm shorter than Scaldis (tables 1A, 1B).
- 3) AHF116 has a shorter lemma awn length compared to Scaldis (tables 2A, 2B).
- 4) The distance between the two most lower whorls is less for AHF116 than Scaldis (tables 2A, 2B).
- 5) The length of the panicle from the lower most whorl to the apex is shorter for AHF116 compared to Scaldis (tables 2A, 2B).
- 6) AHF116 expresses more plants with an erect growth habit compared to Scaldis (tables 5A, 5B).

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURE MARKETING SERVICE  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MARYLAND 20705

EXHIBIT C

(Fine Leaved Fescues)

OBJECTIVE DESCRIPTION OF VARIETY  
FINE LEAVED FESCUES  
(*Festuca spp.*)

NAME OF APPLICANT(S) <u>Advanta Seeds B.V.</u> <del>• Kenneth Highlight c/o Advanta Seeds Pacific •</del> <u>BT: 8/8/2006</u>	TEMPORARY DESIGNATION AHF116	VARIETY NAME. <u>AHF116 (BT: 10/6/2006)</u>
ADDRESS (Street and No. or R.F.D. No., City, State, Zip Code) <u>• 33725 Columbus St. S.E. •</u> <u>Dijkwelsetraat 70</u> <u>• Albany, Oregon •</u> <u>NL-4421 AJ Kapelle</u> <u>BT: 8/8/2006</u> <u>The Netherlands</u>		FOR OFFICIAL USE ONLY PVPO NUMBER <b>2005 000 96</b>

Place the appropriate number that describes the varietal character of this variety in the boxes below. Use leading zeroes when necessary: (e.g., 0 8 or 0 9). Characteristics described including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticulture Society or any recognized color fan may be used to determine plant colors; designate system used: \_\_\_\_\_  
Describe location of test area, conditions and number of plants used: See section 16, page 4.

1. SPECIES: (With comparison varieties for use below - use varieties within species of application variety)

- |   |               |                     |                |
|---|---------------|---------------------|----------------|
| ___ 1 = <i>F. rubra ssp. commutata</i> (Chewings)     | 11 = Cascade  | 12 = Highlight      | 13 = Jamestown |
| ___ 2 = <i>F. rubra ssp. litoralis</i> (Creeping Red) | 14 = Banner   | 15 = Barfalla       | 23 = Merlin    |
| ___ 3 = <i>F. rubra ssp. rubra</i> (Spreading Red)    | 21 = Dawson   | 22 = Starlight      |                |
| ___ 4 = <i>F. ovina</i> (Sheep)                       | 24 = Pennlawn |                     |                |
|   | 31 = Boreal   |                     |                |
|   | 34 = Ensylva  |                     |                |
| <u>53</u> 5 = <i>F. longifolia</i> (Hard)             | 41 = Covar    |                     |                |
| ___ 6 = <i>F. tenuifolia</i> (Fine-Leaved Sheep)      | 51 = Durar    | 52 = Biljart (C-26) | 53 = Scaldis   |
| ___ 7 = Other (Specify) F. _____                      | 61 = Panda    | 62 = Barok          |                |

2. CYTOLOGY:

- 4 2 Chromosome Number 3 Ploidy 1 = diploid 2 = tetraploid 3 = hexaploid  
4 = octoploid

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

- 2 Northeast 0 Southeast 0 North Central 2 Pacific N.W. Other (Specify) \_\_\_\_\_

4. MATURITY: Date First Headed (panicle emergence) Location(s) of Trial(s) \_\_\_\_\_

- 3 Maturity Class:  
1 = Very Early (Covar) 2 = Early (Highlight) 3 = Medium Early (Boreal, Dawson)  
4 = Medium Late (Cascade, Ruby) 5 = Late (Jamestown, Agram) 6 = Very Late  
Date Headed 45.00 days after March 1,  
\_\_\_\_ Days earlier than . . . . .  
\_\_\_\_ Maturity same as . . . . . 53  
\_\_\_\_ Days later than . . . . .
- } Comparison Variety

5. Plant Height: (At maturity; to top of panicle; Average of 10 culms)

- 583.50 mm height  
47.50 mm shorter than . . . . . 53  
Height same as . . . . .  
\_\_\_\_ mm taller than . . . . .
- } Comparison Variety

6. GROWTH HABIT: (Mature)

- 2 1 = Erect (Ruby) 2 = Semi-erect (Highlight) 3 = Prostrate (Silvana)

7. RHIZOMES:

- 1 1 mm Length 1 mm Width 1 mm Internode length  
1 = Absent (Highlight) 2 = Weakly Creeping (Dawson) 3 = Strongly Creeping (Boreal)  
4 = Very Strongly Creeping (Fortress)

## 8. LEAF BLADE:

- 3 Color: 1 = Light Green (Starlight) 2 = Medium Light Green (Highlight) 3 = Medium Dark Green (Ruby, Agram)  
 4 = Dark Green (Jamestown, Manoir) 5 = Bluegreen (Saphir) 6 = Graygreen (Scaldis)  
 7 = Other (Specify) \_\_\_\_\_
- 1 Glaucoity (Sowing Year): 1 = Absent (Koket) 2 = Present (Vendrome)
- 1 Anthocyanin: 1 = Absent 2 = Present 1 Hairs (Basal) 1 = Absent 2 = Present
- 1 Margins: 1 = Smooth 2 = Semi-rough 3 = Rough
- 1 Margin folding (closure): 1 = Rolled inward (closed-Highlight) 2 = Flat (open-Jamestown, Engina)
- 3 Width class:  
 1 = Very Fine (Agram, Frida) 2 = Fine (Jamestown, Highlight, Banner, Dawson)  
 3 = Medium Fine (Fortress, Ruby, Scaldis) 4 = Medium Coarse (Engina)

248.80 mm Length (flag leaf)

15.00 mm Shorter than . . . . . 53 } Comparison Variety

Blade length same as . . . . . 1

1 mm Longer than . . . . . 1

1 mm Width (flag leaf)

▲ 1 mm Narrower than . . . . . 1 } Comparison Variety

Blade width same as . . . . . 53

▲ 1 mm Wider than . . . . . 1

## 9. LEAF SHEATH:

- 1 Anthocyanin (seedling): 1 = Absent (Highlight) 2 = Present (Jamestown, Fortress, Marga)
- 1 Auricle Hairiness: 1 = Absent 2 = Present
- 1 Margins: 1 = Open (Highlight) 2 = Closed (Jamestown)

## 10. PANICLE (Mature plant):

- 1 Shape: 1 = Narrow-tapering 2 = Ovate 3 = Oblong 4 = Other (Specify) \_\_\_\_\_
- 2 Type: 1 = Open 2 = Intermediate 3 = Compact
- 1 Orientation: 1 = Erect 2 = Nodding
- 2 Branch Pubescence: 1 = Glabrous 2 = Pubescent
- 1 Anther Color: } 1 = Yellowish Green 2 = Green 3 = Bluish Green 4 = Purplish  
1 Glume Color (At 50% } 5 = Reddish 6 = Other (Specify) \_\_\_\_\_  
 flowering):

503.00 mm Length

50.50 mm Shorter than . . . . . 53 } Comparison Variety

Panicle length same as . . . . . 1

1 mm Longer than . . . . . 1

## 11. PALEA:

- 2 Hairs (On keels or margins): 1 = Absent (Banner) 2 = (Agram, Scaldis, Olds)  
 3 = Long (Ranier, Fortress, Jamestown)



## 12. LEMMA (Mature):

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2 Hairs: 1 = Absent (Jamestown) 2 = Several 3 = Many (Highlight)

5.18 mm Lemma Length

1 mm Shorter than . . . . . 1

Lemma length same as . . . . . 53

1 mm Longer than . . . . . 1

} Comparison Variety

0.87 mm Lemma Width

1 mm Narrower than . . . . . 1

Lemma width same as . . . . . 53

1 mm Wider than . . . . . 1

} Comparison Variety

2 Awns: 1 = Absent 2 = Present

1.75 mm Awn Length

0.24 mm Shorter than . . . . . 53

Awn length same as . . . . . 1

1 mm Longer than . . . . . 1

} Comparison Variety

## 13. SEED (With lemma &amp; palea):

3 Size Class (g/1000 seed):  
1 = <.9g (Biljart, Dawson) 2 = .91-< 1.1g (Jamestown, Highlight)  
3 = 1.1 - 1.3 g (Fortress, Novorubra) 4 = > 1.3g (Boreal, Golfrood)

1,226.00 mg per 1000 seed

1 mg per 1000 seed less than . . . . . 1

Seed Weight same as . . . . . 1

119.00 mg per 1000 more than . . . . . 53

} Comparison Variety

## 14. DISEASE, INSECT, AND NEMATODE REACTION (0 = Not Tested, 1 = Susceptible, 2 = Resistant):

0 Melting-out *Drechslera poae*  
(*Helminthosporium vagans*)

0 Leaf spot *D. siccans*

0 Net blotch *D. dictyoides*

0 Leaf spot *Bipolaris sorkiniana*

0 Brown patch *Rhizoctonia solani*

0 Powdery Mildew *Erysiphe graminis*

0 Stripe smut *Ustilago striiformis*

0 F. Patch, Pink snow-mold *Fusarium nivale*

0 Fusarium blight *F. tricinctum*, *F. roseum*

0 Gray snow mold *Typhula loliae*

0 Stem rust *Puccinia graminis*

0 Stripe rust *P. striiformis*

0 Leaf rust *P. poae-nemoralis*

0 *P. crandalli*

0 Pythium Blight *Pythium ultimum*

0 Red thread *Corticium fusciforme*

0 Dollar spot *Sclerotinia homoeocarpa*

0 Insect \_\_\_\_\_

0 Nematode \_\_\_\_\_

0 Other \_\_\_\_\_

0 Other \_\_\_\_\_

0 Other \_\_\_\_\_

15. **GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY.** For the following characteristics indicate Degree of Resemblance by placing the column marked, D. R., 1 of the following numbers:

1 = Application variety is less than comparison variety.

2 = Same As

3 = More than, better, greater, darker, more disease resistant, etc.

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CHARACTER	VARIETY	D. R.	CHARACTER	VARIETY	D.R.
Rhizome Length	Scaldis	2	Growth Habit	Scaldis	3
Leaf Width	Scaldis	2	Leaf Color	Scaldis	2
Panicle Color	Scaldis	1	Panicle Shape	Scaldis	2
Winter Color	Scaldis	2	Cold Injury	Scaldis	2
Shade Tolerance	Scaldis	2	Heat	Scaldis	2
Drought	Scaldis	2	Disease*	Scaldis	2

\* Specify each disease evaluated.

16. **ADDITIONAL DESCRIPTION:** (Use additional sheets as required)

Describe all characteristics that cannot be adequately described in the form above in Exhibit D. Comparative varieties should be used as may be appropriate, such as for disease. Append all comparative trial and evaluation data, including measured characters, environmental, and disease test.

A morphological nursery designated 02PVPOFD was established in September 2002, in Albany, Oregon. Experimental design consisted of 3 entries; 4 replications per entry; 20 plants per replication; for a total of 80 plants per entry. Scaldis was used as a standard. Plants were established on 2.5 foot centers with a skip row between replications and between entries.

The nursery received 30 pounds of nitrogen per acre rate following establishment and 50 pounds of nitrogen per acre per year in 2003 and 2004. The fertilizer source was 15 - 15 - 15 and was applied as a split application with ½ applied in the spring and ½ in the autumn. The nursery was sprayed twice each spring, 3 weeks between applications, with Quilt (2oz/acre rate), to prevent stem rust. One pound of Karmex per acre rate was applied during the late summer to prevent emergence of volunteer seedlings.

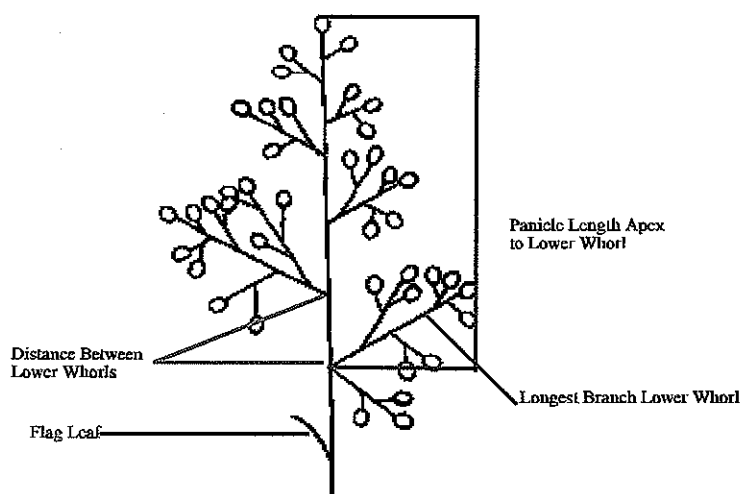
Data was analyzed using analysis of variance for a randomized complete block design. Means were calculated for each replication and then analyzed for tables 1A, 1B, 2A, and 2B.

Tables 3A, 3B, 4A, 4B, 5A, and 5B data was analyzed using binary data confidence intervals. The confidence intervals are given for the characteristics which expressed significant differences.

**Additional Description****AHF116 Hard Fescue**

AHF116 has improved characteristics over current cultivars, such as Scaldis. AHF116 is a more compact cultivar compared to Scaldis (tables 1A, 1B) with the mature plant height shorter than Scaldis, but taller than HOE. The panicle length of AHF116 is also reduced compared to Scaldis, but longer than HOE (tables 1A, 1B). The flag leaf characteristics; length, height, and sheath length are all greater than HOE (tables 1A, 1B). AHF116 has more spikelets per panicle compared to HOE (tables 2A, 2B).

AHF116 may be differentiated from Scaldis on several visual characteristics. AHF116 exhibits a higher frequency of plants with pubescence on the panicle branch compared to HOE (tables 3A, 3B). AHF116 produces fewer plants with several lemma hairs compared to Scaldis (tables 4A, 4B). The frequency of glabrous leaf sheath surface hairs is greater for AHF116 than HOE (tables 4A, 4B). AHF116 produces more plants with an erect growth habit compared to Scaldis (tables 5A, 5B). The weight of 1,000 seeds of AHF116 is greater than HOE and Scaldis (tables 4A, 4B).

**Panicle Type Inflorescence****Illustration 1.**

2003 Morphological Data

Table 1A

Cultivar	Heading Date days after March 1	Anthesis Date days after March 1	Genetic Color	Mature Plant Height (mm)	Plant Width (mm)	Panicle Length (mm)	Flag Leaf Length (mm)	Flag Leaf Height (mm)	Flag Leaf Sheath Length (mm)	Flag Leaf Internode Length (mm)	Leaf Blade Length (mm)	Leaf Blade Height (mm)	Leaf Sheath Length (mm)
AHF116	47.25	57.00	5.26	583.50	98.80	503.00	248.80	242.80	167.30	67.30	170.80	94.00	95.30
HOE	43.75	57.75	5.39	481.80	93.50	419.30	180.50	199.00	125.30	56.00	123.00	123.00	123.00
Scaldis	48.00	57.75	5.23	631.00	100.80	553.50	263.80	268.50	179.00	69.00	180.50	101.00	100.80
LSD 5%	2.94	0.61	0.36	26.00	7.50	28.40	14.90	21.90	13.70	12.00	16.30	8.40	11.20
C.V.	4.62	0.77	4.98	3.35	5.57	4.20	4.69	6.72	6.33	13.58	7.48	6.92	9.21

2004 Morphological Data

Table 1B

Cultivar	Heading Date days after March 1	Anthesis Date days after March 1	Genetic Color	Mature Plant Height (mm)	Plant Width (mm)	Panicle Length (mm)	Flag Leaf Length (mm)	Flag Leaf Height (mm)	Flag Leaf Sheath Length (mm)	Flag Leaf Internode Length (mm)	Leaf Blade Length (mm)	Leaf Blade Height (mm)	Leaf Sheath Length (mm)
AHF116	36.25	45.75	5.68	735.30	219.50	644.30	237.00	261.50	163.80	91.50	169.50	83.50	88.80
HOE	36.00	45.75	5.46	675.80	206.30	594.30	203.30	223.80	141.80	77.00	137.80	69.30	72.30
Scaldis	36.50	45.50	5.56	803.80	212.50	714.80	252.80	264.50	175.50	87.30	170.00	73.50	87.00
LSD 5%	2.01	1.35	0.19	24.00	17.30	24.40	23.90	23.90	13.70	13.10	13.60	14.50	7.40
C.V.	4.03	2.16	2.46	2.36	5.91	2.73	7.52	6.96	6.19	11.22	6.21	14.00	6.54

■ Cultivar under evaluation  
 ■ Significant difference over two years one location.  
 ■ Significant difference over one year one location.  
 ■ Measurements taken in Albany, Oregon  
 4 reps; 20 plants/rep = 80 data points

Table 2A

2003 Laboratory Morphological Data

Cultivar	Lemma Length (mm)	Lemma Width (mm)	Lemma Awn Length (mm)	Glume Length (mm)	Florets per Spikelet	Spikelet Length (mm)	Length of Longest Whorl (mm)	Distance Between Lower Most Whorls (mm)	Number of Spikelets on the Longest Whorl	Spikelets per Panicle	Length of Panicle from Lower Most Whorl to Tip (mm)
AHF116	5.35	0.97	1.96	4.82	7.60	10.50	55.10	33.00	8.00	34.75	108.93
HOE	5.18	0.98	2.13	4.65	7.50	10.45	51.30	30.93	6.50	27.00	96.30
Scaldis	5.36	1.04	2.42	4.96	7.95	11.20	56.80	37.40	7.25	31.25	119.60
LSD 5%	0.20	0.03	0.22	0.33	0.79	0.71	3.97	2.48	1.05	2.01	4.61
C.V.	2.79	2.37	7.54	4.97	7.45	4.81	5.31	5.35	10.53	4.72	3.10

Table 2B

2004 Laboratory Morphological Data

Cultivar	Lemma Length (mm)	Lemma Width (mm)	Lemma Awn Length (mm)	Glume Length (mm)	Florets per Spikelet	Spikelet Length (mm)	Length of Longest Whorl (mm)	Distance Between Lower Most Whorls (mm)	Number of Spikelets on the Longest Whorl	Spikelets per Panicle	Length of Panicle from Lower Most Whorl to Tip (mm)
AHF116	5.18	0.87	1.75	4.29	5.18	9.78	53.23	34.75	7.25	30.75	112.18
HOE	5.13	0.84	1.67	4.23	5.53	10.13	54.10	36.03	7.00	27.00	109.88
Scaldis	5.50	0.93	1.99	4.74	6.25	11.08	58.00	40.95	7.00	30.25	127.95
LSD 5%	0.37	0.08	0.21	0.30	0.37	0.44	3.59	3.51	0.40	3.15	8.82
C.V.	5.10	6.71	8.47	4.89	4.73	3.10	4.74	6.85	4.08	7.81	5.50

■ Cultivar under evaluation  
 ■ Significant difference over two years one location.  
 ■ Significant difference over one year one location.  
 Measurements taken in Albany, Oregon  
 4 reps; 20 plants/rep = 80 data points

Table 3A  
2003 Morphological Measurements of the Panicle

Cultivar	Anther Color % Yellow	Anther Color % Purple	Panicle Color % Red	Glume Color % Purple	Panicle Orientation % Nodding	Panicle Shape % Narrow	Panicle Shape % Ovate	Panicle Shape % Oblong	Panicle Type % Open	Panicle Type % Intermediate	Panicle Type % Compact	Percent Branches of Lower Whorl =1	Percent Branches of Lower Whorl =2	Percent Branches of Lower Whorl =3	Panicle Branch Pubescence		
															% Present	Lower CI	Upper CI
AHF116	23	59	89	44	0	6	45	49	49	45	6	85	15	0	82	0.736	0.904
HOE	10	61	88	65	0	14	39	48	48	39	14	84	16	0	28	0.182	0.378
Scaldis	23	51	95	53	0	20	41	39	39	41	20	78	23	0	68	0.578	0.782
LSD <sub>05</sub>																	

(BT:10/6/2006)

Table 3B  
2004 Morphological Measurements of the Panicle

Cultivar	Anther Color % Yellow	Anther Color % Purple	Panicle Color % Red	Glume Color % Purple	Panicle Orientation % Nodding	Panicle Shape % Narrow	Panicle Shape % Ovate	Panicle Shape % Oblong	Panicle Type % Open	Panicle Type % Intermediate	Panicle Type % Compact	Percent Branches of Lower Whorl =1	Percent Branches of Lower Whorl =2	Percent Branches of Lower Whorl =3	Panicle Branch Pubescence		
															% Present	Lower CI	Upper CI
AHF116	9	78	41	8	0	10	39	51	51	39	10	81	16	0	98	0.949	1.011
HOE	4	81	41	4	0	16	34	50	50	34	16	95	5	0	53	0.421	0.639
Scaldis	10	70	31	4	0	24	45	31	31	45	24	80	19	1	79	0.701	0.879
LSD <sub>05</sub>																	

(BT:10/6/2006)

■ Cultivar under evaluation  
 ■ Significant difference over two years one location.  
 ■ Significant difference over one year one location.  
 Measurements taken in Albany, Oregon  
 4 reps; 20 plants/rep = 80 data points  
 CI = Confidence Interval

Table 4A 2003 Additional Measurements of the Leaf Blade and Seed

Cultivar	Node Color % Distinct	Lemma Hairs % Absent	Lemma Hairs % Several	Lemma Hairs			Lemma Awn % Present	Palea Hairs % Present	Leaf Blade Margin Hairs % Present	Leaf Sheath Auricle Hairs % Present	Leaf Sheath Surface Hairs			Leaf Sheath Collar Hairs % Glabrous	Leaf Blade Surface Hairs % Present	Seed Weight 1,000 seeds (mg)
				%	Lower CI	Upper CI										
				Many	CI	CI										
AHF116	75	0	72	28	0.622	0.818	100	100	48	0	15	0.072	0.228	100	0	1286
HOE	75	0	77	23	0.678	0.862	100	100	36	0	1	0.000	0.032	100	0	1048
Scaldis	81	0	92	8	0.861	0.979	100	100	31	0	20	0.112	0.288	100	0	1096
LSD.05																

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Table 4B 2004 Additional Measurements of the Leaf Blade and Seed

Cultivar	Node Color % Distinct	Lemma Hairs % Absent	Lemma Hairs % Several	Lemma Hairs			Lemma Awn % Present	Palea Hairs % Present	Leaf Blade Margin Hairs % Present	Leaf Sheath Auricle Hairs % Present	Leaf Sheath Surface Hairs			Leaf Sheath Collar Hairs % Glabrous	Leaf Blade Surface Hairs % Present	Seed Weight 1,000 seeds (mg)
				% Many	Hairs		% Present					% Glabrous	Lower CI	Upper CI		
					Lower CI	Upper CI										
AHF116	23	0	68	32	0.578	0.782	100	100	30	0	11	0.041	0.179	100	0	1226
HOE	21	0	72	28	0.622	0.818	100	100	31	0	5	0.002	0.098	100	0	1051
Scaldis	35	0	86	14	0.784	0.936	100	100	29	0	28	0.182	0.378	100	0	1107
LSD.05																

08-10-2006

Cultivar under evaluation

Significant difference over two years one location.

Significant difference over one year one location.

Measurements taken in Albany, Oregon

4 reps; 20 plants/rep = 80 data points

CI= Confidence Interval

2003 Additional Morphological Measurements

Table 5A

Cultivar	Growth Habit at Anthesis		Growth Habit at Anthesis % Semi-Erect	Leaf Blade Anthocyanin % Purple	Leaf Blade Margin Folding % Closed	Leaf Sheath Margins % Open	Seedling Leaf Sheath Color % Purple	Rhizomes % Present	Spring Growth Habit % Prostrate	Spring Growth Habit % Semi-Erect	Spring Growth Habit % Erect	Rhizomes % Present
	% Erect	Lower CI	Upper CI									
AHF116	53	0.421	0.639	46	1	100	5	0	84	16	0	0
HOE	35	0.245	0.455	56	9	100	3	0	86	14	0	0
Scaldis	25	0.155	0.345	58	18	100	5	0	67	33	0	0
LSD.05 (df:12/6/2006)												

2004 Additional Morphological Measurements

Table 5B

Cultivar	Growth Habit at Anthesis		Growth Habit at Anthesis % Semi-Erect	Leaf Blade Anthocyanin % Purple	Leaf Blade Margin Folding % Closed	Leaf Sheath Margins % Open	Seedling Leaf Sheath Color % Purple	Rhizomes % Present	Spring Growth Habit % Prostrate	Spring Growth Habit % Semi-Erect	Spring Growth Habit % Erect	Rhizomes % Present
	% Erect	Lower CI	Upper CI									
AHF116	74	0.641	0.834	24	3	100	8	0	0	100	0	0
HOE	36	0.255	0.465	48	16	100	4	0	0	100	0	0
Scaldis	45	0.341	0.559	40	15	100	5	0	0	100	0	0

■ Cultivar under evaluation

■ Significant difference over two years one location.

■ Significant difference over one year one location.

Measurements taken in Albany, Oregon

4 reps; 20 plants/rep = 80 data points

CI= Confidence Interval



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

**EXHIBIT E****STATEMENT OF THE BASIS OF OWNERSHIP**

1. NAME OF APPLICANT(S) Advanta Seeds B. V.	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER AHF116	3. VARIETY NAME  'AHF116' (BT: 10/6/2006)
4. ADDRESS (Street and No., or R.F.D. No., City, State, and Zip, and Country)  Dijkwelsestraat 70 NL-4421 AJ Kapelle The Netherlands (BT: 10/6/2006)	5. TELEPHONE (Include area code)  +31 113 347 900	6. FAX (Include area code)  55 2237 + 31 113 347 900 (BT: 9/8/2006)
	7. PVPO NUMBER  200500096	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.

☒ YES☐ NO

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.

the Netherlands

☐ YES☒ NO

10. Is the applicant the original owner?

If no, please answer one of the following:☒ YES☐ NO

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES☐ NO

If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES☒ NO

If no, give name of country the Netherlands

11. Additional explanation on ownership (if needed, use the reverse for extra space):

**PLEASE NOTE:**

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

**The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.**

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